







ALIREZA KARIMI

DATA SCIENTIST
MECHANICAL ENGINEER

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EDUCATION

PhD / Engineering Science & Mechanics

Virginia Tech, Blacksburg, VA
2008 - 2012

MS / Mechanical Engineering

Sharif University, Tehran, Iran
2004 - 2007

BS / Mechanical Engineering

Sharif University, Tehran, Iran
2000 - 2004

CERTIFICATES

Data Science Immersive Bootcamp

General Assembly - 2019

Mathematical Biostatistics Bootcamp

Coursera - 2013

SUMMARY

Data Scientist and Assistant Professor of mechanical engineering with years of experience and a solid background in machine learning and deep learning algorithms, analysis of large-scale datasets, and developing numerical platforms to simulate complex fluid flows. Seeking to leverage my scientific expertise and programming skills in diverse applications of data science.

SKILLS

Data Science: Machine Learning, Deep Learning, Natural Language Processing, Web Scraping, Time Series Analysis

Programming: Python, C/C++, TensorFlow, Scala, HTML, Fortran, MPI, Perl

Data Analytics: SQL, Spark, AWS

Visualization: Tableau, Matplotlib, Seaborn, Bokeh

Engineering: MATLAB, COMSOL, Ansys, Fluent, Mathematica, OpenFOAM, FEniCS, AutoCAD

EXPERIENCE

DATA SCIENCE FELLOW

General Assembly, Boston, MA / October 2018 – February 2019

- Completed 30+ projects and labs utilizing the entire data science workflow, including data acquisition, data cleaning, exploratory analysis, feature selection, modeling, and evaluation
- Utilized a variety of machine/deep learning models to classify a large set of histopathological images of breast tumors
- Built a web application to extract building values from multiple housing websites and calculate the real-time statistics for a given zip code
- Conducted natural language processing on thousands of scraped Reddit posts to train several classification models

ASSISTANT PROFESSOR

Northeastern University, Boston, MA / August 2014 – July 2018

- Developed a numerical platform to simulate the complex behavior of bacterial biofilms
- Mentored graduate students to develop computational programs
- Authored several research proposals submitted to the National Science Foundation (NSF) and Northeastern University
- Organized two scientific conferences in Boston in 2015 and 2017
- Taught several courses of Mechanical Engineering

POSTDOCTORAL RESEARCH ASSOCIATE

University of Notre Dame, Notre Dame, IN / June 2012 – July 2014

- Developed a parallel numerical program to simulate the formation of harmful algal blooms in oceanic environments
- Simulated the collective behavior of swimming microorganisms
- Authored 3 proposals submitted to the NSF, American Chemical Society, and Indiana Clinical and Translational Science Institute